



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND
INTERFERENCES

In re Application of
Robetus A. J. Van Kolenburg

RECORD CARRIER OF THE
OPTICAL DISC TYPE AND
DEVICE FOR RECORDING
AND/OR PLAYBACK FOR USE
WITH SUCH A RECORD
CARRIER

Serial No. 10/014,238

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Examiner: Jorge L. Ortiz Criado

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APPEAL BRIEF UNDER 37 C.F.R. § 41.37

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Real party in interest

The real party of interest is the Assignee who is U. S. Philips Corporation, a corporation existing under the laws of the State of Delaware (hereinafter Appellant).

Related appeals and interferences

There are no related appeals or interferences to the present application that are known to appellants, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of the Claims

Claims 1-20 as filed with the present application for invention are drawn to an optically inscribable record carrier having a preformed track in which an auxiliary signal including a sequence of codes recorded by preformed track modulation, which codes include a sequence of address codes specifying the addresses of the track portions in which the address codes are recorded and special codes which can be distinguished from the address codes specifying control data for controlling a recording by a recording device. Claims 1-20 stand rejected and are the claims that are currently being appealed. A copy of appealed claims 1-20 is contained in Appendix I following this brief.

Status of the Amendments After Final

A response was filed subsequent to the final rejection to overcome the examiner's rejection of claims 1-20 under 35 U.S.C. §102(b). The Examiner in an Advisory Action dated October 5, 2005 indicated that the rejections of claims 1-20 under 35 U.S.C. §102(b) stand.

Summary of the Claimed Subject Matter

The appealed claims define subject matter for special codes within an optical disc that allow increased amount of information to be stored within the special codes.

Appealed claim 1 defines subject matter for a record carrier of the disc-like optically inscribable type as shown in Figure 1 and discussed within the specification to the present invention on page 3, lines 17-18. The record carrier has a preformed track (see page 3, lines 21-22) in which an auxiliary signal comprising a sequence of codes is recorded by means of

a preformed track modulation (see page 4, line 10-page 5, line 4). The codes comprise a sequence of address codes that specify addresses of the track portions in which the address codes are recorded and special codes which can be distinguished from the address codes (see page 5, lines 11-14) that specify control data for controlling a recording by a recording device and which sequence can be obtained by replacing in a sequence of address codes with consecutive address values a plurality of said address by special codes (see page 5, line 24-page 7, line 27), characterized in that, the sequence comprises a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address (see page 8, line 19-page 9, line 14).

Appealed claim 6 defines the device for recording and/or playback a record carry a of the inscribable type as defined by appealed claim 1 (see page 9, line 19-page 14, line 2), the device comprising in reading means for reading the information recorded on the record carrier and recording means for recording the record carrier in accordance with an recording process (see page 9, line 19-page 10, line 4), the reading means comprising means to read the auxiliary signal recorded on a record carrier (see page 10, lines 5-6), selecting means for selectively selecting extracting the special codes and the address codes from the auxiliary signal (see page 10, line 6-page 11, line 30), control means for controlling the recording process (see page 10, line 6-page 11, line 30 reference numeral 94 in Figure 10), characterized in that, the control means are adapted to determine the predetermined positional relationship of the periodic pattern of address codes and special codes (see page 10, lines 6-24) and to control the recording process in accordance with said determination (see page 12, lines 6-7).

Appealed claim 7 defines subject matter for the device according to appealed claim 6, characterized in that, the control means are adapted to read a special area on the record carrier upon detecting a predetermined positional relationship (see page 13, lines 8-18).

Appealed claim 11 defines subject matter for an optically inscribable record carrier disc as shown in Figure 1 and discussed within the specification to the present invention on page 3, lines 17-18. The disc carrier has a preformed track (see page 3, lines 21-22) formed defining an auxiliary signal comprising a sequence of codes formed by a preformed track modulation (see page 4, line 10-page 5, line 4). The codes comprise a sequence of address codes (AC) specifying the addresses of the track portions in which said address codes (AC) are recorded and special codes (SC) which can be distinguished from said address codes (AC) (see

page 5, lines 11-14) specifying control data for controlling a recording by a recording device and which sequence can be obtained by replacing a sequence of address codes (AC) having consecutive address values with special codes (SC), see page 5, line 24-page 7, line 27, characterized in that, the said sequence comprises a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to an additional piece of information(see page 8, line 19-page 9, line 14).

Appealed claim 16 defines subject matter for the device for recording and/or playback a record carry a of the inscribable type as claimed in claim 11 (see page 9, line 19-page 14, line 2), the device comprising in reading means for reading the information recorded on the record carrier and recording means for recording the record carrier in accordance with an recording process (see page 9, line 19-page 10, line 4), the reading means comprising means to read the auxiliary signal recorded on a record carrier (see page 10, lines 5-6), selecting means for selectively selecting extracting the special codes and the address codes from the auxiliary signal (see page 10, line 6-page 11, line 30), control means for controlling the recording process (see page 10, line 6-page 11, line 30 reference numeral 94 in Figure 10), characterized in that, the control means are adapted to determine the predetermined positional relationship of the periodic pattern of address codes and special codes (see page 10, lines 6-24) and to control the recording process in accordance with said determination (see page 12, lines 6-7).

Appealed claim 17 defines subject matter according to appealed claim 16, characterized in that, the control means are adapted to read a special area on the record carrier upon detecting a predetermined positional relationship (see page 13, lines 8-18).

Appealed claim 18 defines subject matter for the device according to claim 17, adapted to cooperate with a record carrier provided with a lead-in zone at an inner part of the record carrier and a lead-out zone at an outer part of the record carrier, characterized in that, the control means are adapted to initially read in the special information in the lead-in zone and, only upon detection of a predetermined positional relationship, subsequently read the lead-out zone (see page 13, lines 8-18).

Grounds of Rejection to be Reviewed on Appeal

The Advisory Action dated October 5, 2005 indicated that the rejections to claim 1-20 stand. Claims 1 through 20 are the appealed claims. Appealed claims 1-20 are

rejected under the provisions of 35 U.S.C. §102(b) as been anticipated by U.S. Patent No. 5,418,764 issued in the name of Roth et al. (hereinafter referred to as *Roth et al.*).

Argument

The rejection of appealed claims 1-20 under the provisions of 35 U.S.C. §102(b) as being anticipated via over *Roth et al.*

A. The rejection under 35 U.S.C. S 102(e)

Appealed claims 1 through 20 stand rejected under the provisions of 35 U.S.C. §102(b) as being anticipated by *Roth et al.* (U.S. Patent No. 5,418,764). The examiner's position is that *Roth et al.* disclose every element defined by appealed claims 1-20.

"To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently." *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

B. The reference

Roth et al. (U.S. Patent No. 5,418,764) teach a record carrier and recording device adapted to read an auxiliary signal that includes address codes and auxiliary codes. The address codes and the auxiliary codes are described as being distinguishable from each other (see Abstract).

Roth et al. in Figure 3 illustrates a format for the code words discussed therein (see col. 4, line 65-col. 5, line 6). Col. 5, lines 5-31 of *Roth et al.* states that Figure 7 illustrates the placement of the code words shown in Figure 3. *Roth et al.* teach that code words illustrated in Figure 3 are placed at equidistant positions (see col. 5, lines 6-11). It should be noted that there is no disclosure or suggestion for any pattern formed by these codes as discussed by *Roth et al.* to have any predetermined positional relationship with respect to a predetermined reference address.

Roth et al. on col. 6, lines 40-54 details that radial positions r1 and r3 can be marked with auxiliary codes; however, there is no disclosure or suggestion for there to be a periodic pattern of address codes and special codes having a predetermined positional relationship with respect to the r1 and r3 reference addresses. Col. 6, lines 55-63 of *Roth et al.*, state that the "position where the auxiliary codes are recorded can be selected freely" and that it is desirable to divide the auxiliary code uniformly along the track. Note that there is no disclosure or suggestion within *Roth et al.* for a periodic pattern of address codes and special codes to have a predetermined positional relationship with respect to a predetermined reference address. *Roth et al.* teach placement for patterns of codes throughout the disc and do not disclose or suggest any predetermined positional relationship with respect to a predetermined reference address.

Roth et al. in Figure 7 do not disclose or suggest the shifting of special codes with respect to the lead-in or lead-out areas of a disc. There is no mention for shifting any of the codes with respect to a lead-in area or a lead-out area of the disc to define a predetermined positional relationship with respect to a predetermined reference address within *Roth et al.*

Roth et al. on columns 4, 5 and 6, disclose a format for code signals having address codes and auxiliary codes, wherein to number of address codes between auxiliary codes may be variable (see column 5, lines 13-16). *Roth et al.* further discuss a lead-in area being defined at a predetermined distance from the center of rotation, a lead-out area defined as beginning before a predetermined radial position, a program area at a predetermined distance from the center of rotation and the position of him address codes at predetermined positions from the center rotation (see column 5, line 40-column 6, line 22). *Roth et al.* further discuss that auxiliary codes be recorded in the lead-in in area and/or the program area which refer to address codes (see column 6, lines 46-50). It should be noted that statement that auxiliary codes refer to address codes do not disclose or suggest "a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address."

Roth et al. teach in Figures 4, 5 and 6, column 5, lines and 41-67, and column 6, lines 1-63) discuss a lead-in area being defined at a predetermined distance from the center of rotation, a lead-out area defined as beginning before a predetermined radial position, a program area at a predetermined distance from the center of rotation and the position of him address codes

at predetermined positions from the center rotation (see column 5, line 40-column 6, line 22). *Roth et al.* further discuss that auxiliary codes be recorded in the lead-in in area and/or the program area which refer to address codes (see column 6, lines 46-50). *Roth et al.* do not discuss "a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address."

C. The differences between the invention and the reference

The appellant, respectfully, submits that *Roth et al.* as discussed on col. 5, lines 5-31 describes placement of the sequence shown in Figure 7 at equidistant positions and makes no disclosure or suggestion for these codes to have any predetermined positional relationship with respect to a predetermined reference address.

The appellant further submits that *Roth et al.* on col. 6, lines 40-54 states that radial positions r1 and r3 can be marked with auxiliary codes and makes is no disclosure or suggestion for a periodic pattern of address codes and special codes having a predetermined positional relationship with respect to the r1 and r3 reference addresses. There is no disclosure or suggestion within *Roth et al.* for a periodic pattern of address codes and special codes to have

The rejection asserts that *Roth et al.* disclose the shifting of special codes with respect to the lead-in or lead-out areas of a disc. The appellant, respectfully, disagrees. *Roth et al.* do not disclose, or suggest, the shifting of special codes with respect to the lead-in or lead-out areas of a disc. In fact, there is no mention for shifting any of the special codes with respect to a lead-in area or a lead-out area of the disc to define a predetermined positional relationship within *Roth et al.*

Appealed claim 1

Appealed claim 1 defines subject matter for a record carrier of the disc-like optically inscribable type, having a preformed track in which an auxiliary signal including a sequence of codes is recorded by means of a preformed track modulation, which codes include a sequence of address codes specifying the addresses of the track portions in which the address codes are recorded and special codes which can be distinguished from said address codes specifying control data for controlling a recording by a recording device and which sequence can be obtained by replacing in a sequence of address codes with consecutive address values a

plurality of the address by special codes, wherein the sequence includes a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address.

The rejection alleges that *Roth et al.* disclose all of elements defined by appealed claim 1. The examiner's position is that *Roth et al.* disclose the sequence of address codes and special codes that are distinguishable from the address codes wherein sequence can be obtained by replacing a sequence of address codes with consecutive address values of special codes. Specifically, the examiner states that *Roth et al.* disclose the sequence having a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address in FIG. 6 and 7, at column 4, line 65-column 5, line 31 and also columns 6 and 7. The appellant, respectfully, submits that there is no disclosure or suggestion within *Roth et al.* for a sequence of address codes and special codes to have a predetermined positional relationship with respect to a predetermined reference address.

The specification to the present invention, beginning on page 8, line 15 and proceeding through page 9, line 17, discusses the positional relationship between special codes and address codes and explains the implementation of this relationship. Page 8, lines 15-18 to the specification to the present invention states that "to indicate the availability special codes in the lead-out area, the position of the special codes if shifted for n frames". In contradistinction to the teaching of the present invention, *Roth et al.* on columns 4, 5 and 6, disclose a format for code signals having address codes and auxiliary codes, wherein to number of address codes between auxiliary codes may be variable (see column 5, lines 13-16). *Roth et al.* further discuss a lead-in area being defined at a predetermined distance from the center of rotation, a lead-out area defined as beginning before a predetermined radial position, a program area at a predetermined distance from the center of rotation and the position of him address codes at predetermined positions from the center rotation (see column 5, line 40-column 6, line 22). *Roth et al.* further discuss that auxiliary codes be recorded in the lead-in in area and/or the program area which refer to address codes (see column 6, lines 46-50). The appellant, respectfully, submits that simply having auxiliary codes referring to address codes is not equivalent to the subject matter defined by appealed claim 1 for "a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address."

The examiner in the Advisory Action dated October 5, 2005 states that the appealed claims have been given there broadest reasonable interpretation consistent with the specification to the present invention. The appellant, respectfully, points out that the examiner does not provide any indication the specific disclose or elements within *Roth et al.* that disclose the various elements of appealed claim 1. The assertion by the examiner that the appealed claims have been given there broadest reasonable interpretation consistent with the specification to the present invention does not explain how the elements for a periodic pattern having a predetermined positional relationship with a predetermined reference address are disclosed by *Roth et al.*

The specification to the present invention on page 8, line 15-page 9, line 17, discusses the positional relationship between special codes and address codes and explains the implementation of this relationship. *Roth et al.* provide no disclosure or suggestion of the subject matter disclosed by page 8, line 15-page 9, line 17 of the specification to the present invention. Appealed claim 1 defines subject matter for the disclosure on page 8, line 15-page 9, line 17 of the specification. The appellant, respectfully, submits that *Roth et al.* provide no disclosure or suggestion addresses for a periodic pattern having a predetermined positional relationship with a predetermined reference address.

Appealed claim 2

Appealed claim 2 defines subject matter for the record carrier defined by claim 1, provided with a lead-in area located at an inner area of the disc including the special codes, characterized in that, the predetermined reference address is the start address or the end address of the lead-in area. The rejection to appealed claim 2 alleges that *Roth et al.* disclose a lead in area located an inner area of the disc comprises special codes and the predetermined reference address is the start or end address of the lead in area at columns 6, line 1-column 7, line 56 and in Figures 6 and 7. The appellant, respectfully, submits that a periodic pattern of address codes and special codes having a predetermined positional relationship to the predetermined reference address defined by appealed claim 2. The appellant asserts that there is no disclosure or suggestion for a periodic pattern of address codes and special codes having a predetermined positional relationship with a predetermined reference address within *Roth et al.*

Appealed claim 3

Appealed claim 3 defines the subject matter for the record carrier of appealed claim 2, wherein the periodic pattern comprises special codes separated by a first number of successive address codes, characterized in that, the periodic pattern is shifted by a predetermined number of address codes with respect to the predetermined reference address.

The rejection to appealed claim 3 alleges that *Roth et al.* teach that the periodic pattern comprises special codes separated by a first number of successive address codes (col. 6, line 1-col. 7, line 56) characterized in that the periodic pattern is shifted by a predetermined number of address codes with respect to the predetermined reference address (col. 7, lines 7-62). The appellant respectfully points out that column 7 of *Roth et al.* teaches that auxiliary codes can be distinguishable from address codes, and that various bit combinations can be used within the codes. There is no disclosure or suggestion within *Roth et al.* on column 6, line 1-column 7, line 56 for the periodic pattern being shifted by a predetermined number of address codes with respect to the predetermined reference address.

Appealed claim 4

Appealed claim 4 defines the subject matter for the record carrier according to appealed claim 2, wherein the periodic pattern includes a first number of distinct special codes separated by a first number of successive address codes, characterized in that, the first number of distinct special codes have a predetermined order.

The rejection to appealed claim 4 alleges that *Roth et al.* teach a periodic pattern comprising a first number of distinct special codes separated by a first number of successive address codes characterized in that the first number of distinct special codes have a predetermined order. The periodic pattern as defined by the rejected claims has a predetermined positional relationship with a predetermined reference address. Appealed claim 4 further defines that the periodic pattern has a first number of distinct special codes separated by a first number of successive address codes wherein the special codes have predetermined order. The examiner's position is that column 7 of *Roth et al.* discloses the various elements of the appealed claim 4. The appellant, respectfully, points out that the rejection does not indicate the items within column 7 of *Roth et al.* that provide this disclosure. The appellant, respectfully, submits that the subject matter for a periodic pattern comprising a first number of distinct special codes

separated by a first number of successive address codes characterized in that the first number of distinct special codes have a predetermined order is not disclosed or suggested by *Roth et al.*

Appealed claim 5

Appealed claim 5 defines subject matter for the record carrier according to claim 2, provided with a lead-out area located at an outer area of the disc, in that the lead-out area comprises additional control information for controlling recording by a recording device, the presence thereof been indicated by the predetermined positional relationship.

The rejection to appealed claim 5 alleges that *Roth et al.* disclose a lead-out area located and out area the disc wherein the lead-out area comprises additional control information for controlling recording by a recording device, the presence thereof the indicated by the predetermined positional relationship in Figures 4, 5 6, as well as column 5, lines 41-67, and column 6, lines 1-63. The appellant respectfully denies the foregoing allegation made by the rejection. The appellant respectfully submits that *Roth et al.* do not disclose or suggest "a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address."

Appealed claim 6

Appealed claim 6 defines the subject matter for the device for recording and/or playback a record carry a of the inscribable type of appealed claim 1, the device comprising in reading means for reading the information recorded on the record carrier and recording means for recording the record carrier in accordance with an recording process, the reading means comprising means to read the auxiliary signal recorded on a record carrier, selecting means for selectively selecting extracting the special codes and the address codes from the auxiliary signal, control means for controlling the recording process, characterized in that, the control means are adapted to determine the predetermined positional relationship of the periodic pattern of address codes and special codes and to control the recording process in accordance with said determination.

The rejection to appealed claim 6 alleges that *Roth et al.* disclose (between the bottom of column 6 to the middle of column 10) recording means for reading information recorded on the record carrier including control means adapted to determine the predetermined

positional relationship of the periodic pattern of address codes and special codes and to control the recording process in accordance with the determination. The appellant, respectfully, submits that *Roth et al.* do not discuss a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address. Furthermore the reading means taught by *Roth et al.* do not disclose or suggest control means better adapted to determine the predetermined relationship with the periodic pattern of address codes to special codes and control the recording process in accordance thereto.

Appealed claim 7

Appealed claim 7 defines subject matter for a device according to claim 6, characterized in that, the control means are adapted to read a special area on the record carrier upon detecting a predetermined positional relationship.

The rejection to appealed claim 7 alleges that *Roth et al.* disclose control means adapted to read a special area on the record carrier upon detecting a predetermined positional relationship (and column 10, lines 16-31). The appellant respectfully points out that this portion of *Roth et al.* simply states that when the auxiliary codes that contain the address values are detected, the address values are stored into memory. There is no disclosure or suggestion within *Roth et al.* of the control means branching upon detecting a predetermined positional relationship. Therefore this rejection is respectfully traversed.

Appealed claim 8

Appealed claim 8 defines subject matter for a device according to claim 7 that is adapted to cooperate with a record carrier provided with a lead-in zone at an inner part of the record carrier and a lead-out zone at an outer part of the record carrier, characterized in that, the control means are adapted to initially read in the special information in the lead-in zone and, only upon detection of a predetermined positional relationship, subsequently read the lead-out zone.

The rejection of appealed claim 8 alleges that *Roth et al.* disclose control means adapted to read special information in the lead-in the zone and only upon detection of the predetermined positional relationship, subsequently read the lead-out zone at column 10, lines 32-45. The appellant respectfully submits that there is no disclosure or suggestion within *Roth et al.* of any action taking place upon detecting a predetermined positional relationship. Simply

put, there is no disclosure or suggestion of any detection of a predetermined positional relationship within *Roth et al.* Therefore, this rejection is respectfully traversed.

Appealed claim 9

Appealed claim 9 defines the device accordingly to claim 1, wherein the predetermined positional relationship is defined by a shifting of the special codes.

The rejection to appealed claim 9, alleges that *Roth et al.* teach the predetermined positional relationship is defined by shifting of special codes at column 5, lines 5-16 and column 6, line 1-column 7, line 56. The appellant, respectfully, asserts that column 7 of *Roth et al.* teach that auxiliary codes can be distinguishable from address codes, and that various bit combinations can be used within the codes. There is no disclosure or suggestion at column 5, lines 5-16 and column 6, line 1-column 7, line 56 or anywhere within *Roth et al.* for the predetermined positional relationship to be defined by a shifting of the special codes.

Appealed claim 10

Appealed claim 10 defines the subject matter for the device accordingly to claim 9, wherein the predetermined positional relationship is defined by the shifting of the special codes with respect to a lead-in area or a lead-out area of the disc.

The rejection of appealed 10 alleges that *Roth et al.* disclose the predetermined positional relationship being defined by the shifting of the special codes with respect to a lead-in area or a lead-out area of the disc in Figures 4-7. The appellant, respectfully, submits that *Roth et al.* do not disclose or suggest the predetermined positional relationship defined by the shifting of the special codes with respect to a lead-in area or a lead-out area of the disc.

Appealed claim 11

Appealed claim 11 defines subject matter for an optically inscribable record carrier disc, having a preformed track formed defining an auxiliary signal comprising a sequence of codes formed by a preformed track modulation, which codes comprise a sequence of address codes (AC) specifying the addresses of the track portions in which said address codes (AC) are recorded and special codes (SC) which can be distinguished from said address codes (AC) specifying control data for controlling a recording by a recording device and which sequence can

be obtained by replacing a sequence of address codes (AC) having consecutive address values with special codes (SC), characterized in that, the said sequence comprises a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to an additional piece of information.

The rejection alleges that *Roth et al.* disclose all of the elements to appealed claim 11. The examiner's position is that *Roth et al.* disclose the sequence for a periodic pattern has a predetermined positional relationship with respect to an additional piece of information in Figures 6 and 7, at column 4, line 65-column 5, line 31 and also columns 6 and 7. The appellant, respectfully, asserts that there is no disclosure or suggestion within *Roth et al.* for the sequence for a periodic pattern to have a predetermined positional relationship with respect to an additional piece of information.

Appealed claim 12

Appealed claim 12 defines subject matter for the record carrier according to claim 11, provided with a lead-in area located at an inner area of the disc comprising said special codes, characterized in that, the additional piece of information is the start address or the end address of the lead-in area.

The rejection to appealed claim 12 alleges that *Roth et al.* disclose a lead in area located an inner area of the disc comprises special codes and the predetermined reference address is the start or end address of the lead in area at columns 6, line 1-column 7, line 56 and in Fig. 6 and 7. The appellant, respectfully, asserts that *Roth et al.* do not disclose or suggest any periodic pattern of address codes and special codes having a predetermined positional relationship with the predetermined reference address.

Appealed claim 13

Appealed claim 13 defines the record carrier according to claim 12, wherein the periodic pattern comprises special codes separated by a first number of successive address codes, characterized in that, the periodic pattern is shifted by a predetermined number of address codes with respect to the additional piece of information.

The rejection to appealed claim 13 alleges that *Roth et al.* teach the periodic pattern comprises special codes separated by a first number of successive address codes (column

6, line 1-column 7, line 56) characterized in that the periodic pattern is shifted by a predetermined number of address codes with respect to the predetermined reference address (column 7, line 7-62). The appellant, respectfully, points out that column 7 of *Roth et al.* teach that auxiliary codes can be distinguishable from address codes, and that various bit combinations can be used within the codes. The appellant asserts that there is no disclosure or suggestion on within *Roth et al.* for a periodic pattern to be shifted by a predetermined number of address codes with respect to the predetermined reference address.

Appealed claim 14

Appealed claim 14 defines the record carrier according to claim 12, wherein the periodic pattern includes a first number of distinct special codes separated by a first number of successive address codes, characterized in that, the first number of distinct special codes have a predetermined order.

The rejection to appealed claim 14 alleges that *Roth et al.* teach a periodic pattern comprising a first number of distinct special codes separated by a first number of successive address codes characterized in that the first number of distinct special codes have a predetermined order. The periodic pattern as defined by the appealed claim 14 has a predetermined positional relationship with a predetermined reference address. Appealed claim 14 further defines that the periodic pattern a first number of distinct special codes separated by a first number of successive address codes wherein the special codes have predetermined order. The appellant, respectfully, submits that the examiner's reading of column 7 within *Roth et al.* is erroneous. The examiner provides no indication of the items within column 7 of *Roth et al.* that disclose a periodic pattern comprising a first number of distinct special codes separated by a first number of successive address codes characterized in that the first number of distinct special codes have a predetermined order. The appellant, respectfully, submits that a periodic pattern comprising a first number of distinct special codes separated by a first number of successive address codes characterized in that the first number of distinct special codes have a predetermined order is not disclosed or suggested within column 7 or anywhere with the teachings of *Roth et al.*

Appealed claim 15

Appealed claim 15 defines the record carrier according to claim 12, provided with a lead-out area located at an outer area of the disc, in that the lead-out area comprises additional control information for controlling recording by a recording device, the presence thereof been indicated by the predetermined positional relationship.

The rejection to appealed claim 15 alleges that *Roth et al.* disclose at Figures 4, 5 6, column 5, lines 41-67, and column 6, lines 1-63 a lead-out area located and out area the disc wherein the lead-out area comprises additional control information for controlling recording by a recording device, the presence thereof the indicated by the predetermined positional relationship. The appellant, respectfully, points out that *Roth et al.* discuss a lead-in area being defined at a predetermined distance from the center of rotation, a lead-out area defined as beginning before a predetermined radial position, a program area at a predetermined distance from the center of rotation and the position of him address codes at predetermined positions from the center rotation (see column 5, line 40-column 6, line 22). *Roth et al.* do not disclose or suggest a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address.

Appealed claim 16

Appealed claim 16 defines the device for recording and/or playback a record carrier of the inscribable type as claimed in claim 11, the device including reading means for reading the information recorded on the record carrier and recording means for recording the record carrier in accordance with an recording process, the reading means comprising means to read the auxiliary signal recorded on a record carrier, selecting means for selectively selecting extracting the special codes and the address codes from the auxiliary signal, control means for controlling the recording process, wherein the control means are adapted to determine the predetermined positional relationship of the periodic pattern of address codes and special codes and to control the recording process in accordance with said determination.

The rejection to appealed claim 16 states that *Roth et al.* disclose (between the bottom of column 6 to the middle of column 10) recording means for reading information recorded on the record carrier including control means adapted to determine the predetermined positional relationship of the periodic pattern of address codes and special codes and to control

the recording process in accordance with the determination. The appellant, respectfully, asserts that *Roth et al.* do not disclose or suggest a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address. Furthermore the reading means taught by *Roth et al.* do not provide control means better adapted to determine the printer relationship of the periodic pattern of address codes to special codes and control the recording process in accordance thereto.

Appealed claim 17

Appealed claim 17 defines the device according to claim 16, wherein the control means are adapted to read a special area on the record carrier upon detecting a predetermined positional relationship.

The rejection to appealed claim 17 alleges that *Roth et al.* disclose control means adapted to read a special area on the record carrier upon detecting a predetermined positional relationship (and column 10, lines 16-31). The appellant, respectfully, points out that this portion of *Roth et al.* simply states that when the auxiliary codes that contain the address values are detected, the address values are stored into memory. There is no disclosure or suggestion within *Roth et al.* of the control means branching upon detecting a predetermined positional relationship.

Appealed claim 18

Appealed claim 18 defines the device according to claim 17, adapted to cooperate with a record carrier provided with a lead-in zone at an inner part of the record carrier and a lead-out zone at an outer part of the record carrier, wherein the control means are adapted to initially read in the special information in the lead-in zone and, only upon detection of a predetermined positional relationship, subsequently read the lead-out zone.

The rejection of claim 18 alleges that *Roth et al.* disclose control means the adapted to read special information in the lead-in the zone and only upon detection ever predetermined positional relationship, subsequently read the lead-out zone at column 10, lines 32-45. The appellant, respectfully, submits that there is no disclosure or suggestion within *Roth et al.* of any action upon detecting a predetermined positional relationship. Furthermore, there is no disclosure or suggestion of a predetermined positional relationship within *Roth et al.*

Appealed claim 19

Appealed claim 19 defines the device accordingly of claim 11, wherein the predetermined positional relationship is defined by a shifting of the special codes.

The rejection to appealed claim 19 alleges that *Roth et al.* teach the predetermined positional relationship is defined by shifting of special codes at column 5, lines 5-16 and column 6, line 1-column 7, line 56. The appellant, respectfully, points out that column 7 of *Roth et al.* teach that auxiliary codes can be distinguishable from address codes, and that various bit combinations can be used within the codes. The appellant asserts that there is no disclosure or suggestion within *Roth et al.* for the predetermined positional relationship being defined by a shifting of the special codes.

Appealed claim 20

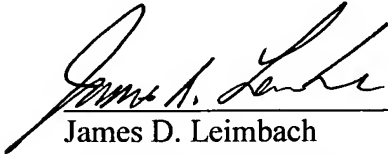
Appealed claim 20 defines the device of claim 19, wherein the predetermined positional relationship is defined by the shifting of the special codes with respect to a lead-in area or a lead-out area of the disc.

The rejection to appealed claim 20 alleges that *Roth et al.* disclose the predetermined positional relationship being defined by the shifting of the special codes with respect to a lead-in area or a lead-out area of the disc in Figures 4-7. The appellant respectfully, submits that *Roth et al.* do not disclose or suggest the predetermined positional relationship defined by the shifting of the special codes with respect to a lead-in area or a lead-out area of the disc.

Conclusion

In summary, the examiner's rejections of the claims are believed to be in error for the reasons explained above. The rejections of each of claims ~~01-20~~ should be reversed.

Respectfully submitted,



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APPENDIX 1. Claims on Appeal

1. A record carrier of the disc-like optically inscribable type, having a preformed track in which an auxiliary signal comprising a sequence of codes is recorded by means of a preformed track modulation, which codes comprise a sequence of address codes (AC) specifying the addresses of the track portions in which said address codes (AC) are recorded and special codes (SC) which can be distinguished from said address codes (AC) specifying control data for controlling a recording by a recording device and which sequence can be obtained by replacing in a sequence of address codes (AC) with consecutive address values a plurality of said address by special codes (SC), characterized in that, the said sequence comprises a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to a predetermined reference address.
2. Record carrier according to claim 1, provided with a lead-in area located at an inner area of the disc comprising said special codes, characterized in that, the predetermined reference address is the start address or the end address of the lead-in area.
3. Record carrier according to claim 2, the periodic pattern comprises special codes separated by a first number of successive address codes, characterized in that, the periodic pattern is shifted by a predetermined number of address codes with respect to the predetermined reference address.
4. Record carrier according to claim 2, the periodic pattern comprising a first number of distinct special codes separated by a first number of successive address codes, characterized in that, the first number of distinct special codes have a predetermined order.
5. Record carrier according to claim 2, provided with a lead-out area located at an outer area of the disc, in that the lead-out area comprises additional control information for controlling recording by a recording device, the presence thereof been indicated by the predetermined positional relationship.

6. Device for recording and/or playback a record carry a of the inscribable type as claimed in claim 1, the device comprising in reading means for reading the information recorded on the record carrier and recording means for recording the record carrier in accordance with an recording process, the reading means comprising means to read the auxiliary signal recorded on a record carrier, selecting means for selectively selecting extracting the special codes and the address codes from the auxiliary signal, control means for controlling the recording process, characterized in that, the control means are adapted to determine the predetermined positional relationship of the periodic pattern of address codes and special codes and to control the recording process in accordance with said determination.

7. Device according to claim 6, characterized in that, the control means are adapted to read a special area on the record carrier upon detecting a predetermined positional relationship.

8. Device according to claim 7, adapted to cooperate with a record carrier provided with a lead-in zone at an inner part of the record carrier and a lead-out zone at an outer part of the record carrier, characterized in that, the control means are adapted to initially read in the special information in the lead-in zone and, only upon detection of a predetermined positional relationship, subsequently read the lead-out zone.

9. Device accordingly to claim 1, wherein the predetermined positional relationship is defined by a shifting of the special codes.

10. Device accordingly to claim 9, wherein the predetermined positional relationship is defined by the shifting of the special codes with respect to a lead-in area or a lead-out area of the disc.

11. An optically inscribable record carrier disc, having a preformed track formed defining an auxiliary signal comprising a sequence of codes formed by a preformed track modulation, which codes comprise a sequence of address codes (AC) specifying the addresses of the track portions in which said address codes (AC) are recorded and special codes (SC) which can be distinguished from said address codes (AC) specifying control data for controlling a recording by a recording device and which sequence can be obtained by replacing a sequence of address codes

(AC) having consecutive address values with special codes (SC), characterized in that, the said sequence comprises a periodic pattern of address codes and special codes which pattern has a predetermined positional relationship with respect to an additional piece of information.

12. Record carrier according to claim 11, provided with a lead-in area located at an inner area of the disc comprising said special codes, characterized in that, the additional piece of information is the start address or the end address of the lead-in area.

13. Record carrier according to claim 12, the periodic pattern comprises special codes separated by a first number of successive address codes, characterized in that, the periodic pattern is a shifted by a predetermined number of address codes with respect to the additional piece of information.

14. Record carrier according to claim 12, the periodic pattern comprising a first number of distinct special codes separated by a first number of successive address codes, characterized in that, the first number of distinct special codes have a predetermined order.

15. Record carrier according to claim 12, provided with a lead-out area located at an outer area of the disc, in that the lead-out area comprises additional control information for controlling recording by a recording device, the presence thereof been indicated by the predetermined positional relationship.

16. Device for recording and/or playback a record carry a of the inscribable type as claimed in claim 11, the device comprising in reading means for reading the information recorded on the record carrier and recording means for recording the record carrier in accordance with an recording process, the reading means comprising means to read the auxiliary signal recorded on a record carrier, selecting means for selectively selecting extracting the special codes and the address codes from the auxiliary signal, control means for controlling the recording process, characterized in that, the control means are adapted to determine the predetermined positional relationship of the periodic pattern of address codes and special codes and to control the recording process in accordance with said determination.

17. Device according to claim 16, characterized in that, the control means are adapted to read a special area on the record carrier upon detecting a predetermined positional relationship.

18. Device according to claim 17, adapted to cooperate with a record carrier provided with a lead-in zone at an inner part of the record carrier and a lead-out zone at an outer part of the record carrier, characterized in that, the control means are adapted to initially read in the special information in the lead-in zone and, only upon detection of a predetermined positional relationship, subsequently read the lead-out zone.

19. Device accordingly to claim 11, wherein the predetermined positional relationship is defined by a shifting of the special codes.

20. Device accordingly to claim 19, wherein the predetermined positional relationship is defined by the shifting of the special codes with respect to a lead-in area or a lead-out area of the disc.